What is claimed is:

1. An interfacing method, wherein a plurality of network printers, which are provided with different kinds of film for image reproduction, are connected by an interface unit to an image information network, the method comprising the steps of:

i) recognizing available kinds of film with respect to each of the network printers, which are connected to the interface unit,

ii) selecting a network printer, which is among the plurality of the network printers and which corresponds to a kind of film coinciding with an output request, in accordance with the results of said recognition, and

iii) giving an output instruction, which coincides with said output request, to the thus selected network printer.

2. An interfacing method as defined in Claim 1 wherein, in cases where there is no network printer, which corresponds to the kind of film coinciding with said output request, a network printer, which corresponds to the kind of film closest to the kind of film coinciding with said output request, is selected as the network printer, which corresponds to the kind of film coinciding with said output request, and

an output instruction, which specifies said

closest kind of film, is given as said output instruction, which coincides with said output request, to the thus selected network printer.

3. An interfacing method, wherein at least one network printer among a plurality of network printers, which are provided with different kinds of film for image reproduction, is connected by each of at least two interface units to an image information network, the method comprising the steps of, in each interface unit:

i) recognizing available kinds of film with respect to each of the at least one network printer, which is connected to the interface unit,

ii) sending information, which represents the results of said recognition, to the other interface unit,

iii) selecting a network printer, which is among the plurality of the network printers and which corresponds to a kind of film coinciding with an output request, in accordance with the results of said recognition and the results of recognition received from the other interface unit, or transferring said output request to the other interface unit, which is connected to the network printer to be selected, and

iv) giving an output instruction, which coincides with said output request, to the thus selected network printer.

4. An interfacing method as defined in Claim 3 wherein, in cases where there is no network printer, which corresponds to the kind of film coinciding with said output request, a network printer, which corresponds to the kind of film closest to the kind of film coinciding with said output request, is selected as the network printer, which corresponds to the kind of film coinciding with said output request, or said output request is transferred to the other interface unit, which is connected to the network printer to be selected, and

an output instruction, which specifies said closest kind of film, is given as said output instruction, which coincides with said output request, to the thus selected network printer.

5. An interfacing method, wherein a plurality of network printers are connected by an interface unit to an image information network, the method comprising the steps of:

i) recognizing whether a state of operation of each of the network printers, which are connected to the interface unit, is normal or abnormal,

ii) selecting a network printer, which is among the plurality of the network printers and which is in the normal operation state, in accordance with the results of said recognition, and

iii) giving an output instruction to the thus selected network printer.

6. An interfacing method, wherein at least one network printer among a plurality of network printers is connected by each of at least two interface units to an image information network, the method comprising the steps of, in each interface unit:

i) recognizing whether a state of operation of each of the at least one network printer, which is connected to the interface unit, is normal or abnormal,

ii) sending information, which represents the results of said recognition, to the other interface unit,

iii) selecting a network printer, which is among the plurality of the network printers and which is in the normal operation state, in accordance with the results of said recognition and the results of recognition received from the other interface unit, or transferring an output request to the other interface unit, which is connected to the network printer to be selected, and

iv) giving an output instruction to the thus selected network printer.

7. An interfacing method, wherein a plurality of network printers, each of which is provided with at least one sorter stage corresponding to an output destination, are connected by an interface unit to an image information network,

the method comprising the steps of:

i) recognizing an output destination corresponding to each sorter stage of each of the network printers, which are connected to the interface unit,

ii) selecting a network printer, which is among the plurality of the network printers and which has a sorter stage corresponding to a specific output destination, in accordance with the results of said recognition, and

iii) giving an output instruction, which coincides with said specific output destination, to the thus selected network printer.

8. An interfacing method, wherein at least one network printer among a plurality of network printers, each of which is provided with at least one sorter stage corresponding to an output destination, is connected by each of at least two interface units to an image information network, the method comprising the steps of, in each interface unit:

i) recognizing an output destination corresponding to each sorter stage of each of the at least one network printer, which is connected to the interface unit,

ii) sending information, which represents the results of said recognition, to the other interface unit,

iii) selecting a network printer, which is among the plurality of the network printers and which has a sorter

stage corresponding to a specific output destination, in accordance with the results of said recognition and the results of recognition received from the other interface unit, or transferring an output request to the other interface unit, which is connected to the network printer to be selected, and

iv) giving an output instruction, which coincides with said specific output destination, to the thus selected network printer.

9. An interfacing method as defined in any of Claims 1 to 8 wherein, in cases where each of the network printers connected to the interface unit is designed to send a monitor signal, which represents a state concerning output, in accordance with a special-purpose protocol, and each of a plurality of terminals, which constitute the image information network, is provided with general-purpose displaying software functions and operates under management with one of plural kinds of operating systems having different forms,

said monitor signal having been sent in accordance with said special-purpose protocol is converted into a signal according to a protocol, which is adapted to displaying with said displaying software functions.

10. An interfacing method as defined in Claim 9 wherein said special-purpose protocol is a Simple Network

Management Protocol, said displaying software functions is a World Wide Web browser, and said protocol adapted to displaying with said displaying software functions is a HyperText Transfer Protocol.

11. An interface unit for connecting a plurality of network printers, which are provided with different kinds of film for image reproduction, to an image information network, the interface unit comprising:

i) a film kind recognizing means for recognizing available kinds of film with respect to each of the network printers, which are connected to the interface unit, and

ii) a printer selecting means for selecting a network printer, which is among the plurality of the network printers and which corresponds to a kind of film coinciding with an output request, in accordance with the results of said recognition having been carried out by said film kind recognizing means,

wherein an output instruction, which coincides with said output request, is given to the network printer having been selected by said printer selecting means.

12. An interface unit as defined in Claim 11 wherein, in cases where there is no network printer, which corresponds to the kind of film coinciding with said output request, said printer selecting means selects a network printer, which corresponds to the kind of film closest to

the kind of film coinciding with said output request, as the network printer, which corresponds to the kind of film coinciding with said output request, and

an output instruction, which specifies said closest kind of film, is given as said output instruction, which coincides with said output request, to the network printer having been selected by said printer selecting means.

13. An interface unit, comprising a group of at least two interface units, each of the at least two interface units connecting at least one network printer among a plurality of network printers, which are provided with different kinds of film for image reproduction, to an image information network, each interface unit comprising:

i) a film kind recognizing means for recognizing available kinds of film with respect to each of the at least one network printer, which is connected to the interface unit, and sending information, which represents the results of said recognition, to the other interface unit, and

ii) a printer selecting means for selecting a network printer, which is among the plurality of the network printers and which corresponds to a kind of film coinciding with an output request, in accordance with the results of said recognition having been carried out by said film kind recognizing means and the results of recognition received from the other interface unit, or transferring said output

request to the other interface unit, which is connected to the network printer to be selected,

wherein an output instruction, which coincides with said output request, is given to the network printer having been selected by said printer selecting means.

14. An interface unit as defined in Claim 13 wherein, in cases where there is no network printer, which corresponds to the kind of film coinciding with said output request, said printer selecting means selects a network printer, which corresponds to the kind of film closest to the kind of film coinciding with said output request, as the network printer, which corresponds to the kind of film coinciding with said output request, or transfers said output request to the other interface unit, which is connected to the network printer to be selected, and

an output instruction, which specifies said closest kind of film, is given as said output instruction, which coincides with said output request, to the network printer having been selected by said printer selecting means.

15. An interface unit for connecting a plurality of network printers to an image information network, the interface unit comprising:

i) an operation state recognizing means for recognizing whether a state of operation of each of the network printers, which are connected to the interface unit,

is normal or abnormal, and

ii) a printer selecting means for selecting a network printer, which is among the plurality of the network printers and which is in the normal operation state, in accordance with the results of said recognition having been carried out by said operation state recognizing means,

wherein an output instruction is given to the network printer having been selected by said printer selecting means.

16. An interface unit, comprising a group of at least two interface units, each of the at least two interface units connecting at least one network printer among a plurality of network printers to an image information network, each interface unit comprising:

i) an operation state recognizing means for recognizing whether a state of operation of each of the at least one network printer, which is connected to the interface unit, is normal or abnormal, and sending information, which represents the results of said recognition, to the other interface unit, and

ii) a printer selecting means for selecting a network printer, which is among the plurality of the network printers and which is in the normal operation state, in accordance with the results of said recognition having been carried out by said operation state recognizing means and

the results of recognition received from the other interface unit, or transferring an output request to the other interface unit, which is connected to the network printer to be selected,

wherein an output instruction is given to the network printer having been selected by said printer selecting means.

17. An interface unit for connecting a plurality of network printers, each of which is provided with at least one sorter stage corresponding to an output destination, to an image information network, the interface unit comprising:

i) an output destination recognizing means for recognizing an output destination corresponding to each sorter stage of each of the network printers, which are connected to the interface unit, and

ii) a printer selecting means for selecting a network printer, which is among the plurality of the network printers and which has a sorter stage corresponding to a specific output destination, in accordance with the results of said recognition having been carried out by said output destination recognizing means,

wherein an output instruction, which coincides with said specific output destination, is given to the network printer having been selected by said printer selecting means.

18. An interface unit, comprising a group of at

least two interface units, each of the at least two interface units connecting at least one network printer among a plurality of network printers, each of which is provided with at least one sorter stage corresponding to an output destination, to an image information network, each interface unit comprising:

i) an output destination recognizing means for recognizing an output destination corresponding to each sorter stage of each of the at least one network printer, which is connected to the interface unit, and sending information, which represents the results of said recognition, to the other interface unit, and

ii) a printer selecting means for selecting a network printer, which is among the plurality of the network printers and which has a sorter stage corresponding to a specific output destination, in accordance with the results of said recognition having been carried out by said output destination recognizing means and the results of recognition received from the other interface unit, or transferring an output request to the other interface unit, which is connected to the network printer to be selected,

wherein an output instruction, which coincides with said specific output destination, is given to the network printer having been selected by said printer selecting means.

19. An interface unit as defined in any of Claims

11 to 18 wherein, in cases where each of the network printers connected to the interface unit is designed to send a monitor signal, which represents a state concerning output, in accordance with a special-purpose protocol, and each of a plurality of terminals, which constitute the image information network, is provided with general-purpose displaying software functions and operates under management with one of plural kinds of operating systems having different forms,

the interface unit further comprises a protocol converting means for converting said monitor signal, which has been sent in accordance with said special-purpose protocol, into a signal according to a protocol, which is adapted to displaying with said displaying software functions.

20. An interface unit as defined in Claim 19 wherein said special-purpose protocol is a Simple Network Management Protocol, said displaying software functions is a World Wide Web browser, and said protocol adapted to displaying with said displaying software functions is a HyperText Transfer Protocol.

21. A client apparatus, which is provided with the functions of interface unit as defined in any of Claims 11 to 18.

22. A method of monitoring a network printer in

a medical network, wherein a network printer designed to send a monitor signal, which represents a state concerning output, in accordance with a special-purpose protocol may be connected to a plurality of terminals, each of which is provided with general-purpose displaying software functions and operates under management with one of plural kinds of operating systems having different forms, the method comprising:

converting said monitor signal, which has been sent in accordance with said special-purpose protocol, into a signal according to a protocol, which is adapted to displaying with said displaying software functions.

23. A method of monitoring a network printer as defined in Claim 22 wherein said special-purpose protocol is a Simple Network Management Protocol, said displaying software functions is a World Wide Web browser, and said protocol adapted to displaying with said displaying software functions is a HyperText Transfer Protocol.

24. A device for monitoring a network printer for use in a medical network, wherein a network printer designed to send a monitor signal, which represents a state concerning output, in accordance with a special-purpose protocol may be connected to a plurality of terminals, each of which is provided with general-purpose displaying software functions and operates under management with one of plural kinds of

operating systems having different forms, the device comprising:

a protocol converting means for converting said monitor signal, which has been sent in accordance with said special-purpose protocol, into a signal according to a protocol, which is adapted to displaying with said displaying software functions.

25. A device for monitoring a network printer as defined in Claim 24 wherein said special-purpose protocol is a Simple Network Management Protocol, said displaying software functions is a World Wide Web browser, and said protocol adapted to displaying with said displaying software functions is a HyperText Transfer Protocol.

26. A method of managing a parameter in a system constituted of a plurality of image output devices, which reproduce medical images and are connected to a network, the parameter representing image processing conditions, or the like, for a medical image to be reproduced by each of the image output devices, the method comprising the steps of:

i) transferring information, which represents a parameter having been altered in one of the image output devices, into at least one image output device among the other image output devices, and

ii) causing said at least one image output device among the other image output devices to carry out image

processing by selectively using said parameter, which has been transferred, or a parameter, which has been set previously in said at least one image output device among the other image output devices.

27. A method of managing a parameter as defined in Claim 26 wherein the information, which represents a parameter having been altered in one of the image output devices, is transferred into image output devices, which are among the other image output devices and are specified under predetermined conditions.

28. A method of managing a parameter as defined in Claim 27 wherein the parameter corresponds to index information, which represents an image recording menu of the medical image to be reproduced by each of the image output devices,

information specifying an image output device, which has the same index information as the index information of each of the image output devices, is entered previously,

at least one image output device, which is among the other image output devices and has the index information corresponding to the parameter having been altered, is specified by making reference to said entered information, and

the information, which represents the parameter having been altered, is transferred into said at least one

image output device, which is among the other image output devices and has thus been specified.

29. A system for managing a parameter, wherein a plurality of image output devices, which reproduce medical images, are connected to a network, and a parameter, which represents image processing conditions, or the like, for a medical image to be reproduced by each of the image output devices, is managed, the system comprising, provided in each image output device:

i) a parameter altering means for altering a parameter,

ii) a transfer means for transferring information, which represents the parameter having been altered, into at least one image output device among the other image output devices,

iii) a receiving means for receiving the transferred information, which represents the parameter having been altered, and

iv) an image processing means for carrying out image processing by selectively using the parameter, which has been received, or a parameter, which has been set previously in said each image output device.

30. A system for managing a parameter as defined in Claim 29 wherein said transfer means transfers the information, which represents the parameter having been

altered, into at least one image output device among the other image output devices, which has been specified under predetermined conditions.

31. A system for managing a parameter as defined in Claim 30 wherein the parameter corresponds to index information, which represents an image recording menu of the medical image to be reproduced by each of the image output devices,

each of the image output devices is provided with an entry means for previously entering information specifying an image output device, which has the same index information as the index information of each of the image output devices, and

said transfer means specifies at least one image output device, which is among the other image output devices and has the index information corresponding to the parameter having been altered, by making reference to said information having been entered by said entry means, and transfers the information, which represents the parameter having been altered, into said at least one image output device, which is among the other image output devices and has thus been specified.

32. A method of managing a parameter comprising the steps of:

i) in response to receipt of an image from an

external device, inquiring data base that stores and manages image processing parameters of all images about said image,

ii) receiving from said data base the latest information about the image processing parameter, and

iii) altering said parameter based on the information received.

33. A system for managing a parameter comprising: i) an image receiving means for receiving an image from an external device,

ii) a data base which stores and manages image processing parameters of all images,

iii) an inquiring means for inquiring said data base about the latest information as to the image processing parameter of the image received by said receiving means, and

iv) a parameter altering means for altering said parameter based on the information received.

34. A method of enabling alteration of parameters held in devices constituting a system comprising the steps of:

i) in response to receipt of an image from an external device by one of said devices, comparing the image processing parameter held in the device with the parameter held by the image received, and

ii) altering said parameter held in the device when there is a difference between said image processing

parameters,

iii) whereby the parameters held in the devices are altered when an image which has changed its image processing passes through the system.

35. A system for enabling alteration of parameters held in devices constituting a system comprising:

i) a comparing means for, in response to receipt of an image from an external device by one of said devices, comparing the image processing parameter held in the device with the parameter held by the image received, and

ii) an altering means for altering said parameter held in the device when there is a difference between said image processing parameters.